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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,063	02/04/2004	Murray S. Toas	D0932-00447	5057

8933 7590 10/25/2005
DUANE MORRIS, LLP
IP DEPARTMENT
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103-4196

EXAMINER

MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,063

Applicant(s)

TOAS ET AL.

Examiner

Matthew D. Matzek

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-17 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-17 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/20/05, 10/20/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS: 12/17/04</u> . |

Response to Amendment

1. The Amendment and Remarks submitted by Applicant dated 9/14/2005 have been accepted and entered into the Record. Claims 18-37 have been canceled along with claim 11. Claims 1-10, 12-17, and 38-41 remain active. The title has been amended to overcome the previously applied objection. Claim 7 has been appropriately amended to overcome the previous rejection under 35 U.S.C. § 112. Applicant's arguments with respect to claims 1-10, 12-17 and 38-41 have been considered but are moot in view of the new ground(s) of rejection. The previously applied art failed to either teach or anticipate the application of an antifungal/antimicrobial agent present in an amount of less than 200 ppm in the cellulosic facing by weight of said facing.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-10, 12-17, and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fay et al. (US 2004/0185204) and further in view of Toreki, et al. (WO 2004/076770 A1) and as evidenced by Furnacecompare.com and Progress-energy.com.

a. Fay et al. teach a fungi-growth inhibiting facing of a building insulation assembly including a central field portion (Abstract). The central field portion may comprise randomly oriented, entangled, glass fibers that are bound by an adhesive binder [0031]. The insulation may be faced with kraft paper with a basis weight of 30 to 40 pounds/3000 ft² [0002]. The kraft paper facing may

comprise a fungicide, biocide and pesticide and may be adhered via a bituminous adhesive [0007].

b. The biocide disclosed by Fay et al. is silver zeolyte, which is commonly used in protecting food packages through its release of silver and is sold as KATHON®, by ROHM AND HAAS®, a biocide fungi-growth inhibiting agent designed for insulation articles [0047]. As it is commonly used in protecting food packages the said biocide is presumed to be nontoxic and noncarcinogenic to humans and does not present significant toxic residue.

c. The article of Fay et al. is necessarily heat resistant to temperatures of 250 °F and molten bituminous adhesive as the applied reference teaches the application of bituminous adhesive to adhere the kraft paper facing to the insulation. Claim 16 is rejected as the bituminous layer may function as a vapor barrier [0050].

d. With regards to the claimed R-values of claim 8, these values are consistent with those of common fiberglass insulation articles known in the art, as evidenced by Furnacecompare.com. It is further noted that insulation capability (R-value) is generally given on a per inch basis and a final R-value is calculated by multiplying the R-value per inch by the total thickness of the insulation. Fiberglass batts have an average R-value of 3.25 per inch and are known to have total R-values up to 30 as evidenced by Progressive-energy.com. Fay et al. disclose a fiberglass insulation comprising fiberglass, binder and biocide, but are silent as to the R-values of said invention. It is reasonable, however to

presume that since the prior art meets the physical and chemical limitation of fiberglass batts and the body of the claim the said featured property is inherent to said insulation article thus providing the present invention the desired physical properties. This is further evidenced by the websites provided and prior Office Actions and provided along with the instant Action.

e. The publication of Fay et al. is silent as to the application of an antifungal/antimicrobial agent in the amount of less than 200 ppm in the cellulosic facing by weight of said facing.

f. Toreki, et al. teach a gypsum board having improved antifungal properties. The polymeric antifungal agent may be present on one or both of the paper facings of the insulative article (Abstract). The applied reference provides an extensive list of chemicals to inhibit fungal and microbial growth (pages 4-11). The antimicrobial polymer coating is applied at between 1 and 5 weight percent of the paper facing (page 19, lines 6-10). Example 11 provides numerous samples of wallboard papers coated with polymeric coatings that range from 0-4% and show that coatings of 1.2 weight percent are effective in inhibiting microbial growth (page 27, lines 1-9). Based upon a solution of 50mL DADMAC (density 1.1 g/mL), 0.75 grams sodium persulfate, and 10 grams polyDADMAC yield a composition of 1.14 wt. % biocide. Applied at 1 wt. % of the paper facing this yields a biocidal concentration of 114 ppm as shown below.

$$\frac{0.75g \text{ sodium persulfate}}{50mL * 1.1g / mL + 0.75g + 10g} = 0.0114 \text{ or } 1.14\% \text{ sodium persulfate}$$

$$0.0114 \text{ sodium persulfate} * 0.01 = 0.000114 \text{ or } 114 \text{ ppm of paper facing}$$

Art Unit: 1771

g. Since Fay et al. and Toreki, et al. are from the same field of endeavor, insulative articles, the purpose disclosed by Toreki, et al. would have been recognized in the pertinent art of Fay et al.

h. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the insulative article of Fay, et al. with a kraft paper facing at the biocide at the level disclosed by Toreki, et al. motivated by the desire to successfully create a microbial and fungicidal resistant insulative article that minimizes the amount of fungicide/biocide used resulting in reduced cost.

i. It should be noted that optimizing the amount or type of biocide included in the insulation article or restraining its content within set values are result effective variables. For example, manipulating the quantity of antifungal/ antimicrobial agent on the cellulosic facing to attain a predetermined value or be in accordance with a standard/test. Biocide/fungicide selection is also a result effective variable. Therefore, it would have been obvious for a person having ordinary skill in the art at the time the invention was made to have made the Fay et al. invention to contain a antifungal/antimicrobial level able to pass ASTM C1338, ASTM D-2020, TAPPI Test T487, or a combination thereof. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1771

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

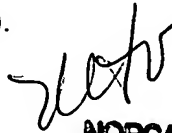
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NORCA TORRES
PRIMARY EXAMINER

mdm

mdm